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GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
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LEONARD K. PETERS
SECRETARY

FACT SHEET

**KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE TREATED WASTEWATER
INTO WATERS OF THE COMMONWEALTH**

KPDES No.: KY0107450 Permit Writer: Diana Davidson Date: April 12, 2010
AI No.: 14209

1. **SYNOPSIS OF APPLICATION**

- a. Name and Address of Applicant
Road Fork Development Co., Inc.
P.O. Box 565
Matewan, West Virginia 25678
- b. Facility Location
Road Fork Development Co., Inc.
Love Branch South
McVeigh, Pike County, Kentucky
- c. Description of Applicant's Operation
Mine Bathhouse
- d. Design Capacity
0.0017 MGD
- e. Description of Existing Pollution Abatement Facilities
Screening, Equalization, Aeration, Disinfection, Post Aeration
- f. Permitting Action
This is a first issuance of a minor KPDES permit for a privately owned wastewater treatment plant serving a coal bathhouse.

2. RECEIVING WATER

a. Name/Mile Point

Facility discharges to sedimentation pond No. 29 discharging to Middle Branch at latitude 37 32' 27" and longitude 82 14'41".

b. Stream Segment Use Classification

Pursuant to 401 KAR 10:026, Section 5, Middle Branch carries the following classifications: Warmwater Aquatic Habitat, Primary and Secondary Contact Recreation and Domestic use.

c. Stream Segment Categorization

Pursuant to 401 KAR 10:030, Section 1 Middle Branch is categorized as a High Quality Water.

d. Stream Low Flow Condition

The 7-day, 10-year low flow and harmonic mean conditions of Middle Branch are 0.0 and 0.0 cfs, respectively.

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Serial Number 001 - Sanitary Wastewater (Design Flow = 0.0017 MGD)

Effluent Characteristics	Reported Discharge Monthly Average	Reported Discharge Daily Maximum	Proposed Limits Monthly Average	Proposed Limits Daily Maximum	Applicable Water Quality Criteria and/or Effluent Guidelines
Flow (MGD)	NR	NR	Report	Report	401 KAR 5:065, Section 2(4) 40 CFR 122.4(i)(1)(ii)
CBOD ₅ (mg/l)	NR	NR	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
TSS (mg/l)	NR	NR	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 2 and 3
<i>Escherichia Coli</i> (N/100 ml)	NR	NR	130	240	401 KAR 10:031, Section 7 401 KAR 5:045, Section 4 401 KAR 5:080, Section 2(3)
Ammonia Nitrogen (as mg/l N)	NR	NR	20	30	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
Dissolved Oxygen (mg/l) (minimum)	NR	NA	Not less than 7.0		401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
pH (standard units)	NR	NR	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4 401 KAR 5:045, Section 4
Total Residual Chlorine (mg/l)	NR	NR	0.011	0.019	401 KAR 10:031, Section 4(k)

The data contained under the reported discharge columns is not available due to new issuance.

The abbreviation CBOD₅ means Carbonaceous Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation NR means not reported on the Discharge Monitoring Report (DMR).

The effluent limitations for CBOD₅ and TSS are Monthly (30 day) and Weekly (7 day) Averages.

The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.

4. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Outfall 001 Sanitary Wastewater (Design Flow = 0.0017 MGD)

b. Effluent Characteristics

Flow, CBOD₅, TSS, Fecal Coliform Bacteria, *Escherichia Coli*, pH, Ammonia Nitrogen, Dissolved Oxygen, Total Residual Chlorine (TRC).

c. Pertinent Factors

None

d. Monitoring Requirements

Flow monitoring shall be conducted instantaneously once per quarter.

CBOD₅, TSS, Ammonia Nitrogen, shall be monitored once per quarter by 24 hour composite sampling.

Escherichia Coli, pH, Dissolved Oxygen and Total Residual Chlorine shall be monitored once per quarter by grab sample.

e. Justification of Conditions

The Kentucky regulations cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

Escherichia Coli

The limits for *Escherichia Coli* are consistent with the requirements of 401 KAR 10:031, Section 7, 401 KAR 5:045 Section 4 and 401 KAR 5:080, Section 2(3). EPA recommends *Escherichia Coli*, which is specific to fecal material from warm-blooded animals, as the best indicator of health risk from contact with recreational waters.

Flow

The monitoring requirements for this parameter are consistent with the requirements of 40 CFR 122.44(i)(1)(ii) as incorporated by 401 KAR 5:065, Section 2(4).

CBOD₅, Ammonia Nitrogen, and Dissolved Oxygen

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4, and 401 KAR 5:045, Sections 3 and 5. Section 4 of 5:031 establishes water quality criteria for the protection of Kentucky's waters. Section 5 of 5:045 requires biochemically degradable wastewaters to receive treatment in excess of secondary treatment if the Cabinet determines that the receiving water would not satisfy applicable water quality standards as a result of a facility discharge or discharges from multiple facilities.

Total Suspended Solids

The limits for this parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Sections 2 and 3. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Sections 2 and 3 of 5:045 require biochemically degradable wastewaters to receive secondary treatment.

pH

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Section 4. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Section 4 of 5:045 establishes the acceptable levels of these parameters for biochemically degradable wastewaters.

Total Residual Chlorine

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4.

5. **ANTIDEGRADATION**

The conditions of 401 KAR 5:029, Section 1 have been satisfied by this permit action. This permit action involves the first issuance of a new permit. This new discharge is to existing sediment pond. Therefore, a review under 401 KAR 5:030 Section 1 is not applicable.

6. **PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS**

The permittee will comply with all effluent limitations by the effective date of the permit.

7. **PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE**

Disposal of Non-Domestic Wastes

The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures. This requirement is consistent with the requirements of 401 KAR 5:065, Section 1(5) and 401 KAR 5:080, Section 2(3).

Certified Operators

Pursuant to 401 KAR 5:010, Section 1 wastewater systems shall be operated under the supervision of a certified operator who holds a Kentucky Certificate equivalent to the class of system being supervised.

Pursuant to 401 KAR 5:010, Section 3 the certified operator shall be reasonably available if not physically present while the system is operating.

Outfall Signage

It is the Best Professional Judgment of the Division of Water, 401 KAR 5:080, Section 2(3), that all permittees post a marker at all discharge locations and/or monitoring points. The marker shall be of sufficient size to display the Permittee Name, KPDES permit and outfall numbers in 2 inch letters and shall be prominently displayed. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and is to be posted as near as possible to the actual sampling location.

8. **PERMIT DURATION**

Five (5) years. This facility is in the Big and Little Sandy/ Tygart Watershed Basin per the Kentucky Watershed Management Framework.

9. **PERMIT INFORMATION**

The application, draft permit, fact sheet, public notice, comments received, and additional information is available from the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

10. **REFERENCES AND CITED DOCUMENTS**

All material and documents referenced or cited in this fact sheet are a part of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

11. **CONTACT**

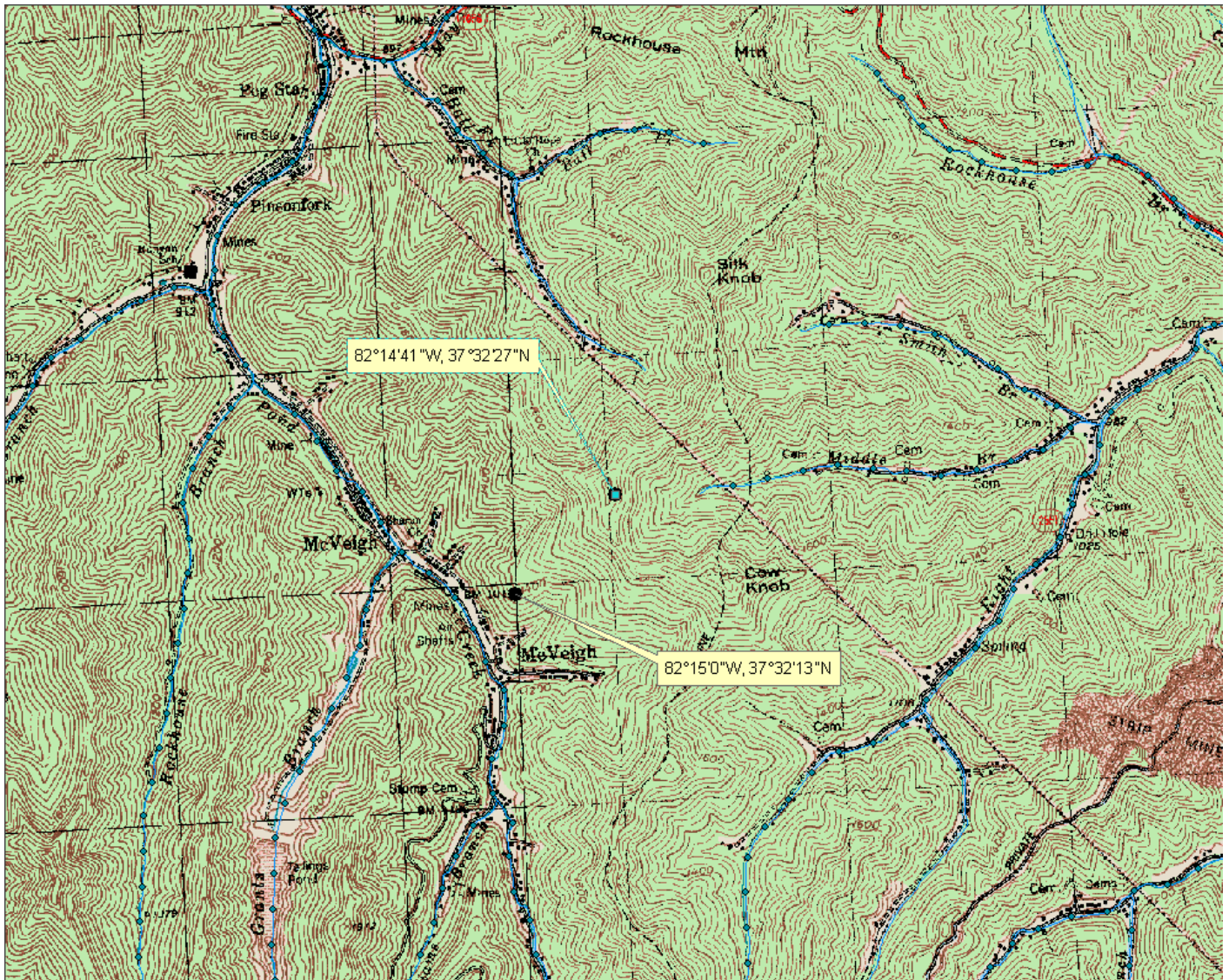
For further information on the draft permit or comment process, contact the individual identified on the Public Notice or the Permit Writer - Ross Bishop at (502) 564-8158, extension 4899, or email Ross.Bishop@ky.gov.

12. **PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final decision, deadline for comments and other information required by 401 KAR 5:075, Section 4(2)(e).

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Road Fork Development Company, Inc.



KPDES



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

PERMIT NO.: KY0107450
AI NO.: 14209

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

Road Fork Development Company, Inc.
P.O. Box 565
Matewan, West Virginia 25678

is authorized to discharge from a facility located at

Road Fork Development Company, Inc.
Love Branch South
McVeigh, Pike County, Kentucky

to receiving waters named

Pond 29 to Middle Branch at latitude 37° 32' 27" and longitude 82° 14' 41"

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, and IV hereof. The permit consists of this cover sheet, and Part I 2 pages, Part II 1 pages, and Part III 1 page.

This permit shall become effective on.

This permit and the authorization to discharge shall expire at midnight,

Date Signed

Sandra L. Gruzesky, Director
Division of Water

PART I A - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 - Sanitary Wastewater (Design Flow = 0.0017 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	(lbs/day) Monthly Avg.	Daily Max.	Other Units (Specify) Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Quarter	Instantaneous
CBOD ₅ (mg/l)	0.43	0.64	30	45	1/Quarter	24 Hr Composite
TSS (mg/l)	0.43	0.64	30	45	1/Quarter	24 Hr Composite
Ammonia Nitrogen (as mg/l N)	0.29	0.43	20	30	1/Quarter	24 Hr Composite
Dissolved Oxygen (mg/l) (minimum)	NR	NA	Not less than	7.0	1/Quarter	Grab
<i>Escherichia Coli</i> (N/100 ml)	N/A	N/A	130	240	1/Quarter	Grab
Dissolved Oxygen (mg/l) (minimum)	N/A	N/A	Not less than		1/Quarter	Grab
pH (standard units)	N/A	N/A	6.0 (min)	9.0 (max)	1/Quarter	Grab
Total Residual Chlorine (mg/l)	N/A	N/A	0.011	0.019	1/Quarter	Grab

The abbreviation BOD₅ means Biochemical Oxygen Demand (5-day).

The abbreviation CBOD₅ means Carbonaceous Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation N/A means Not Applicable.

The effluent limitations for CBOD₅ and TSS are Monthly (30 day) and Weekly (7 day) Averages.

The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:
nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

PART I B - SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with all requirements on the effective date of this permit.

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PART II - STANDARD CONDITIONS FOR KPDES PERMIT

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

All conditions of 40 CFR 122.41 (401 KAR 5:065, Section 2(1)) are hereby incorporated by reference as conditions of this permit.

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PART III - OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each monitoring period must be reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you. The completed DMR for each monitoring period must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

Division of Water
Hazard Regional Office
233 Birch Street, Suite 1
Hazard, Kentucky 41701
ATTN: Supervisor

Division of Water
Surface Water Permits Branch
Permit Support Section
200 Fair Oaks Lane
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Disposal of Non-Domestic Wastes

The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures.

D. Certified Operators

This wastewater system shall be operated under the supervision of a Class I,II,III or IV Kentucky Certified Operator who shall be reasonably available at all times.

E. Outfall Signage

The permittee shall post a permanent marker at all discharge locations and/or monitoring points. The marker shall be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and shall be posted as near as possible to the actual sampling location.